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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,463	07/21/2003	Michio Kitazume	018842.1271	4534

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EXAMINER

EDGAR, RICHARD A

ART UNIT

PAPER NUMBER

3745

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/622,463

Applicant(s)

KITAZUME, MICHIO

Examiner

Richard Edgar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/21/2003</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

Figures 5 and 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 6-10 attempt to characterize the relative relationship between the blades in a group, but the language used is not definite. Applicant uses "a diameter direction" instead of "a radial direction", "inside" and "outside", but does not say relative to what.

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Claim 6 requires warping of the blades being different. Applicant has not shown or described what "warped" means. Such a term is not known to one having ordinary skill in the art of injection molded sirocco fans.

Claim 8 recites a thickness dimension, but does not specify any defined direction from which the thickness is being measured.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, as far as they are definite, are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 6,139,273 (Schwartz et al. hereinafter).

Schwartz et al. teach a multiblade blower comprising an impeller having a plurality of blades 140, 160 placed circumferentially, wherein an airflow is generated from a radially inward direction to a radially outward direction, relative to a rotational axis, upon rotation of said impeller, wherein the blades comprise a first row of blades and a second row of blades, wherein said first row is disposed radially inwards with respect to said second row.

The leading edge of a blade from the second row of blades is placed between a pressure side of a trailing edge of an adjacent blade from the first row and a suction side of the other blade from the first row.

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A space between the leading edge of the second row of blades and the pressure surface of one of the first blades is smaller than a space between the leading edge of the second blades and the suction side of the first blade.

Each blade has an aerodynamic cross-section.

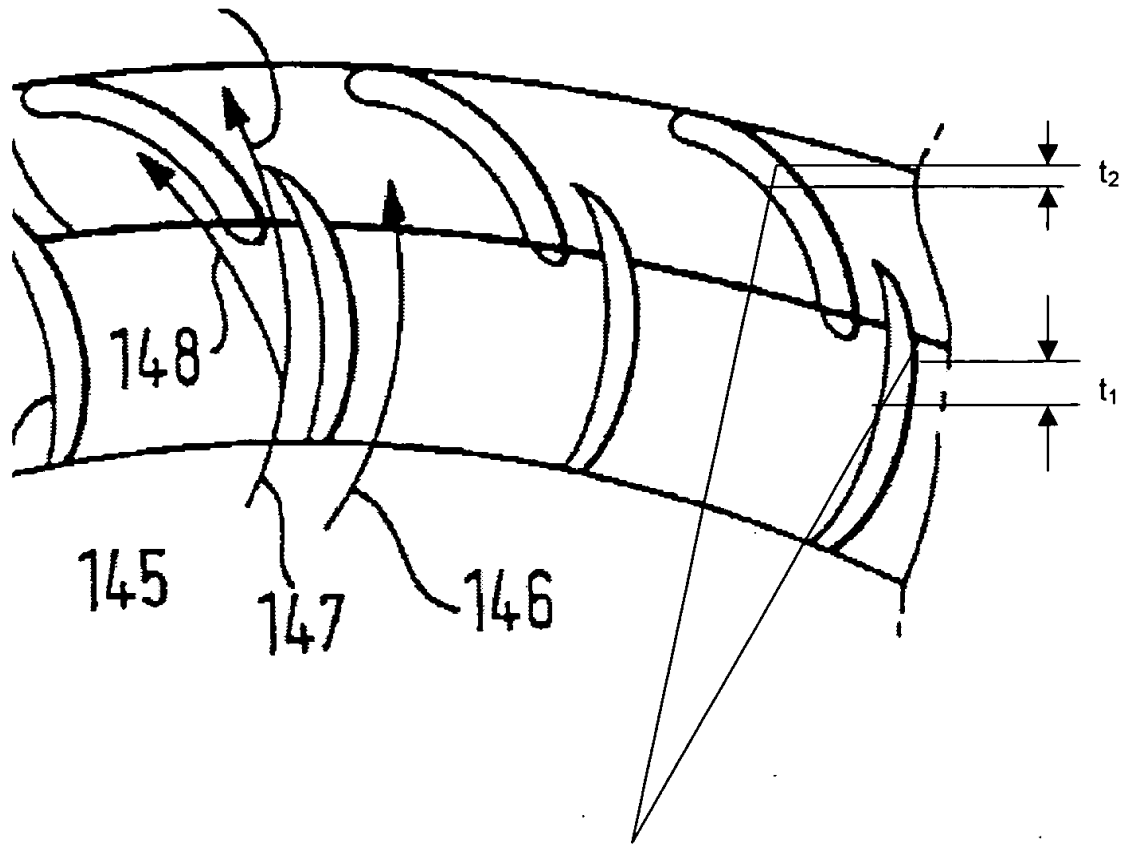
Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-8, as far as they are definite, are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 6,139,273 (Schwartz et al. hereinafter) as applied to claim 4 above, and further in view of United States Patent No. 4,900,228 (Yapp hereinafter).

Schwartz et al. teach a sirocco fan for a vehicle air conditioning system having two sets of blades arranged in an alternating pattern. As can be seen in Figure 4 the chord length of the first blades are larger than the chord length of the second blades. And referring to the illustration below, a thickness dimension of the first blade (t_1) is larger than a thickness dimension of the second blade (t_2) in a direction radial from a rotational axis.



Schwartz et al. do not disclose the impeller being made from resin.

Yapp disclose a vehicle air conditioning fan (col. 2, lines 27-28) having two sets of blades 14,15 arranged in an alternating pattern wherein the impeller is injected molded using plastic materials (col. 6, lines 18-19) for the purpose of producing an impeller from suitable materials for use in an automobile air conditioning system.

Since Schwartz et al. show an automobile air conditioning impeller and Yapp teaches that plastic should be used for producing impellers for automotive air conditioning systems, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to make the impeller of Schwarz et al. based on the teachings of Yapp for the purpose of producing an impeller from suitable materials for use in an automobile air conditioning system.

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Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Edgar whose telephone number is (703) 305-0050. Effective November 22, 2004 the examiner's telephone number will be (571) 272-4816. The examiner can normally be reached on Monday thru Friday, 8:00 am until 4:00 pm EST.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (703) 308-1044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Richard Edgar
Examiner
Art Unit 3745

RE



F. DANIEL LOPEZ
PRIMARY EXAMINER